

ABSTRACT OF THE DISCLOSURE

A network paging system and method implementing a Mobile IP protocol that allows transparent routing of IP datagrams sent by a Correspondent Node (CN) (any Internet node that wants to communicate with a Mobile Node) to a Mobile Node (MN) in the Internet is disclosed. The IP paging protocol disclosed is an extension to Mobile IP to allow dormant mode operation permitting conservation of battery power when not receiving/sending IP datagrams. The disclosed technique permits a mobile node to alternate between dormant and active modes to conserve its power resources. In the disclosed invention, the mobile node does not perform location updates as long as it is in dormant mode. In a preferred embodiment, the implement IP paging protocol is a Layer-3 protocol used to find the paging area, in which the MN is located and to alert MN to come out of dormant mode, whenever there is an incoming traffic. The present invention in some preferred embodiments defines a new paging protocol, which uses triggers from Layer-2 to gracefully bring down the Layer-3 interface. The disclosed IP paging protocol benefits from a link layer (Layer-2 or L2) triggers, which provide timely information to network layer (Layer-3 or L3) about the progress of events in Layer-2.